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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/993,562	11/27/2001	Tadayuki Tsutsui	111223	7418
25944	7590	11/26/2004		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER LAVILLA, MICHAEL E	
			ART UNIT 1775	PAPER NUMBER

DATE MAILED: 11/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,562

Applicant(s)

TSUTSUI ET AL.

Examiner

Michael La Villa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 4, 6-10, 16, and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 and 9 is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 6, 8, 10, 16 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:
2. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
3. Claims 1, 3, 5, 6, 8, 10, 16, and 17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. See the reasons of record in the Office Action mailed on 6 August 2004 and the Interview Summary of 5 November 2004. In the context of the invention as now claimed, there is no apparent support for a fatigue limit ratio of 0.3 or more (Claims 1, 3, 5, 6, 10, and 17), 0.3 or more with soft nitriding (Claim 8), or 0.35 or more (Claim 16).

Response to Amendment

- I. In view of applicant's amendments and explanations, the claim objection of the Office Action mailed on 6 August 2004 is withdrawn.
- II. In view of applicant's amendments and explanations, applicant traverses the section 112, second paragraph rejection of the Office Action mailed on 6 August 2004. Rejection is withdrawn.

- III. In view of applicant's amendments and explanations, applicant traverses the section 112, first paragraph new matter rejection of the Office Action mailed on 6 August 2004. Applicant argues that the disclosure on page 3 of the Specification and in Table 4 of the Specification support the claim as now pending. The description at page 3, paragraph 9 refers to high fatigue limit ratio being obtained when the roundness requirement is satisfied, without any particular mentioning of what would constitute high. That description does not specifically relate to varying the roundness ratio in order to obtain ratios of more than about 0.45. The entry in Table 4 exemplifies a fatigue limit ratio of 0.53, obtained with soft nitriding treatment. It is unclear where ratios in excess of 0.53 are taught or where applicant discloses achieving values of 0.53 in the absence of soft nitriding treatment. As was explained in the Interview Summary, the originally filed disclosure, as pertains to the subject matter of pending Claim 1, refers to fatigue limit ratio of about 0.30 to about 0.45. Applicant has failed to indicate persuasively how one of ordinary skill in the art would recognize the broader invention as now claimed as having been in possession of applicant at the time of filing the application.
- IV. In view of applicant's amendments and explanations, applicant traverses the section 112, first paragraph enablement rejection of the Office Action mailed on 6 August 2004. Rejection is withdrawn.

- V. In view of applicant's amendments and explanations, applicant traverses the section 102 and 103 rejection over Tabuchi of the Office Action mailed on 6 August 2004. Rejections are withdrawn.
- VI. In view of applicant's amendments and explanations, applicant traverses the section 103 rejection over Allen of the Office Action mailed on 6 August 2004. Rejection is withdrawn.

Allowable Subject Matter

4. Claims 7 and 9 are allowed. Neither the reviewed prior art nor the prior art of record teaches or suggests the claimed subject matter of Claims 7 and 9. Particularly, in the context of the respective claims, the claimed requirements of having a mechanical plating layer and a zinc chromate film, respectively, are not taught or suggested.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
6. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory

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action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (571) 272-1539. The examiner can normally be reached on Tuesday, Thursday, and alternating Fridays.
8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael La Villa
18 November 2004

